**From:** Turner, Philip
**To:** Webster, Susan; Crossland, Ronnie
**Cc:** Loesel, Matthew; Petersen, Chris
**Subject:** RE: Trafalgar Road/Brown Tree Care VOC data/Do you have 2:30 pm available today for briefing?
**Date:** Tuesday, December 18, 2018 2:05:11 PM

I'm available… just point me in the right direction (i.e., where?)

**From:** Webster, Susan
**Sent:** Tuesday, December 18, 2018 1:59 PM
**To:** Crossland, Ronnie <Crossland.Ronnie@epa.gov>
**Cc:** Loesel, Matthew <loesel.matthew@epa.gov>; Petersen, Chris <petersen.chris@epa.gov>; Turner, Philip <Turner.Philip@epa.gov>
**Subject:** Trafalgar Road/Brown Tree Care VOC data/Do you have 2:30 pm available today for briefing?

We should be getting the 2 deliverables from Turner in the next 30 minutes. I would like to take the David update from that information.

Per Turner on data:

All VOCs at all the off-site sample locations (Locations 11, 12 and 14) are at acceptable levels.

December 11 benzene levels were equivalent to the benzene level of 18 and 9.7 µg/$m^3$ at locations 11 and 12, respectively. December 12 benzene levels were the equivalent of 7.2 ug/$m^3$ at location 12. All results were non-detect for location 11 on December 12 and on both dates for location 14. Benzene detections at these locations were all below the chronic RSL of 31 µg/$m^3$.

Benzene was detected at the on-site sample location (Location 13) at a level of 70 µg/$m^3$ on December 11, which exceeds the chronic RSL of 31 µg/$m^3$. However, the on-site benzene level of 70 µg/$m^3$ is within a factor of two of the subchronic RCL of 82 µg/$m^3$ and therefore does not represent an immediate health concern. Benzene detection from the on-site location sample was 29 µg/$m^3$ on December 12, which is below the chronic RSL of 31 µg/$m^3$.

On December 13, benzene was detected from locations 11, 12 and 13 at levels of 2.7, 3.3 and 21 µg/$m^3$, respectively. All of these are below the chronic RSL of 31 µg/$m^3$.
No other chemicals were detected from locations 11 or 12. Location 13 also had detections of acetone, tetrahydrofuran, toluene and m,p-xylene. These were all below RSLs. No VOCs were detected from either location 14 sample.

**From:** Crossland, Ronnie
**Sent:** Tuesday, December 18, 2018 12:34 PM
**To:** Webster, Susan <webster.susan@epa.gov>; Loesel, Matthew <loesel.matthew@epa.gov>

**Subject:** FW: EnvironX Solutions - Environmentally friendly fire suppressant

Need a brief update on data for David

Ronnie

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**From:** Gray, David
**Sent:** Tuesday, December 18, 2018 12:31 PM
**To:** Edlund, Carl <edlund.carl@epa.gov>; Crossland, Ronnie <Crossland.Ronnie@epa.gov>; Webster, Susan <webster.susan@epa.gov>; Petersen, Chris <petersen.chris@epa.gov>
**Subject:** FW: EnvironX Solutions - Environmentally friendly fire suppressant

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**From:** Peter Christie <pchristie@bellavistaar.gov>
**Sent:** Tuesday, December 18, 2018 10:23 AM
**To:** Gray, David <gray.david@epa.gov>
**Subject:** Re: EnvironX Solutions - Environmentally friendly fire suppressant

Thank you!

Peter Christie, Mayor
Bella Vista, AR

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**From:** Gray, David <gray.david@epa.gov>
**Sent:** Tuesday, December 18, 2018 5:32:58 AM
**To:** Peter Christie
**Cc:** keogh@adeq.state.ar.us
**Subject:** Re: EnvironX Solutions - Environmentally friendly fire suppressant

Thank you, Mayor. Our experts provided information about options to extinguish the fire to ADEQ on Sunday. We hope the evaluation has been helpful. I will check on the status of chemical air sampling data today and update you on our timetable. We will get it to you as soon as it is ready and by December 21.

Best,
David

Sent from my iPhone

On Dec 18, 2018, at 5:24 AM, Peter Christie <pchristie@bellavistaar.gov> wrote:

> Fyi

Peter Christie, Mayor
Bella Vista, AR

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**From:** (b) (6)
**Sent:** Monday, December 17, 2018 11:45:53 PM
**To:** Peter Christie
**Subject:** EnvironX Solutions - Environmentally friendly fire suppressant

Dear Mayor Christie,

Thank you so much for taking the time to talk with me after tonight's City Council meeting. I appreciate the time you and the Council took to hear all the citizens, myself included, at tonight's meeting.

As we discussed, I'd like to bring to your attention this product called Peat FireX from EnvironX Solutions. The website about the company and the product can be found here - https://environxsolutions.com/about-peat-firex/

http://www.environxsolutions.com/pdf/peatfirex.pdf

For a bit of background - this product is composed mainly of 2 components: Guar Gum which is made from plants and monoammonium phosphate which is both a nitrogen fertilizer and is the dry powder in chemical fire extinguishers. The guar gum is heat resistant and - unlike water - will not evaporate at high temperatures and will deliver the fire suppressing monoammonium phosphate to the fire in order to be smothered.

This product is mixed with water and can be applied both topically (via hose, bambi bucket or sprinkler) and will penetrate 15 feet deep or can be injected for deeper fire source.

While the product is named Peat FireX, it is useful for subterranean fires made of peat, muck, coal or a landfil.

This information can be found from their patent for the product which can be accessed here - https://patents.google.com/patent/US20130299202

Here is a news article where the product was tested. I think the most important take away from this article is that the fire department used 150 gallons of the product on their test site whereas they had used 2000 gallons of water on the site the day before. This product will SIGNIFICANTLY reduce the amount of water needed to extinguish the fire which will, in turn, minimize the contamination risk to Lake Ann.
http://www.environxsolutions.com/pdf/seminole-producer.pdf

A further article from Scientific American discusses peat fires and how this product

works to combat them - http://environxsolutions.com/pdf/scientific-american.pdf

Here are some video links of fire departments testing this product and showing how effective it is:

A hay bale burning at 1000 degrees can be touched with just a dribble of the product - https://www.youtube.com/watch?v=OWAQ7fp_1mY

Georgia Forestry is using the product to extinguish a fire that went through an old logging site - https://www.youtube.com/watch?v=yGB6MRT8hes

BLM is using it in Florida to fight wild fires - https://www.youtube.com/watch?v=VcmLif8sm_E

I spoke with David Kilpatrick VP and General Counsel from Environex Solutions and he was very optimistic that the Trafalger Fire is an ideal application for this product and that it would be highly effective in putting the fire out, preventing it from restarting and smoldering. He also informed me that it is incredibly cost effective and the fire could be put out with tens of thousands of dollars worth of product.

I urge you to please consider this product and bring it to the attention of the ADEQ and the EPA, if the City is unable to take unilateral action. Peat Fire X really does seem to be the simple solution for this problem - its fairly inexpensive, effective, and will not introduce more toxins into our environment.

Please let me know if I can be of any further assistance. I would be honored to serve and help solve this community in any way that I can.

Thank you,

(b) (6)